

WORKSHOP DRAFT

FUGITIVE DUST

Adopted 06-19-79
(Amended 10-19-93, XX-XX-XX)

100 GENERAL:

1001 PURPOSE: To reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (man-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions.

1012 APPLICABILITY: The provisions of this rule shall apply to any activity or man-made condition capable of generating fugitive dust. The provisions of this rule apply to all of Placer County.

103 EXEMPTIONS: The provisions of this rule shall not apply to:

103.1 ~~Agricultural operations to the extent that the operations are exempted by law from District regulation~~activities conducted and maintained for commercial agricultural purposes.

103.2 Active operations conducted during emergency life-threatening situations, or in conjunction with any officially declared disaster or state of emergency.

103.3 Active operations conducted by essential service utilities to provide electricity, natural gas, telephone, water and sewer during periods of service outages and emergency disruptions.

103.4 Any contractor subsequent to the time the contract ends, provided that such contractor implemented the required control measures during the contractual period.

~~103.5 Any grading contractor, for a phase of active operations, subsequent to the contractual completion of that phase of earth-moving activities, provided that the required control measures have been implemented during the entire phase of earth-moving activities, through and including five days after the final grading inspection.~~

103.65 Weed abatement operations, fire hazard abatement, or vegetation clearing for fire defense purposes ordered by a county agricultural commissioner or any state, county, or municipal fire

department, ~~or required by a local ordinance provided that no nuisance results from such activity.~~ The provisions of this clause does not exempt the owner of any property from controlling fugitive dust emissions emanating from disturbed surface areas which have been created as a result of the weed abatement actions.

~~103.76 To a~~Unpaved roads, provided such roads:

~~103.76.1 Are less than 50 feet in width at all points along the road; and~~Are not within and part of a property under development or construction, or an access road to such a property; or

~~103.76.2 Are within 25 feet of the property line; and~~Are public unpaved roads, except for public road construction or maintenance.

~~103.7.3 Have a traffic volume less than 20 vehicle trips per day.~~

~~103.87 To a~~Any active operation, open storage pile, or disturbed surface area for which necessary fugitive dust preventive or mitigating actions are in conflict with the federal Endangered Species Act.

~~103.98 To a~~Non-routine or emergency maintenance of flood control or irrigation channels, canals, and water spreading basins.

~~103.409~~ The provisions of Section 300 shall not apply to blasting operations that have been permitted by the California Division of Industrial Safety.

~~103.44~~10 The provisions of Section ~~405~~304 shall not apply to earth coverings of public paved roadways where such coverings are approved by a ~~local~~ government agency for the protection of the roadway, and where such coverings are used as roadway crossings for haul vehicles.

~~103.11~~The provisions of Section 303 shall not apply to any facility having non-fugitive particulate matter emissions that are permitted by the District in accordance with Rule 501, GENERAL PERMIT REQUIREMENTS.

~~103.12~~Quarrying and surface mining operations, or to sand and gravel mining, rock crushing, and aggregate and sand processing operations, provided that a permit has been issued by the District in accordance with Rule 501, GENERAL PERMIT REQUIREMENTS, for such operations.

103.13 The provisions of Section 400 shall not apply to any facility permitted by the District in accordance with Rule 501, GENERAL PERMIT REQUIREMENTS.

200 DEFINITIONS

201 ACCESS ROAD: Any road extending from a public thoroughfare onto the property of a construction project or development project.

2042 ACTIVE OPERATIONS: Any activity capable of generating fugitive dust, including, but not limited to, earth-moving activities, construction/ demolition activities, or heavy- and light-duty vehicular movement on disturbed surface areas, including inactive disturbed surface areas, and unpaved roads within a construction or a development project site or an access road.

203 AGRICULTURAL ACTIVITY: Any activity, operation, facility, or appurtenances thereof, including, but not limited to, the cultivation and tillage of the soil, dairying, the production, cultivation, growing, and harvesting of any agricultural commodity including timber, viticulture, apiculture, or horticultural, the raising of livestock, fur bearing animals, fish, or poultry, and game birds, and any practices performed by a farmer or on a farm incident to or in conjunction with those farming operations, including preparation for market, delivery to storage or to market, or delivery to carriers for transportation to market.

~~**202 ANEMOMETERS:** Devices used to measure wind speed and direction in accordance with the performance standards.~~

2034 ASBESTOS: Asbestiforms of the following minerals: chrysotile (fibrous serpentine), crocidolite (fibrous riebeckite), amosite (fibrous ummingtonite-grunerite), fibrous tremolite, fibrous actinolite, and fibrous anthophyllite.

2045 ASBESTOS AIRBORNE TOXIC CONTROL MEASURE FOR CONSTRUCTION, GRADING, QUARRYING, AND SURFACE MINING OPERATIONS: A regulation adopted as ~~§~~Section 93105, ~~†~~Title 17, California Code of Regulations (CCR) by the California Air Resources Board per Health and Safety Code ~~§~~Section 39666 which requires the adoption of regulations to reduce emissions of identified airborne toxics to the lowest level achievable.

2056 BULK MATERIAL: Any material which can emit dust when stored, disturbed, or handled, and is generally un-packaged, including ~~s~~Sand, gravel, soil, aggregate material less than two inches in length or diameter, and other organic or inorganic particulate matter.

2067 CHEMICAL STABILIZERS: A non-toxic chemical dust suppressant which must not be used if prohibited for use by the Regional Water Quality Control Boards, the California Air Resources Board, the Environmental Protection Agency, or any applicable law, rule or regulation; and should meet any specifications, criteria, or tests required by any federal, state, or local water agency. Unless otherwise indicated, the use of a non-toxic chemical stabilizer shall be of sufficient concentration and application frequency to maintain a stabilized surface.

2078 CONSTRUCTION/DEMOLITION ACTIVITIES: Any on-site mechanical activities preparatory to or related to the building, alteration, rehabilitation, demolition or improvement of property, including, but not limited to the following activities; grading, excavation, loading, crushing, cutting, planing, shaping or ground breaking.

2089 CONTRACTOR: Any person who has a contractual arrangement to conduct an active operation for another person.

20910 DISTURBED SURFACE AREA: A portion of the earth's surface that has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural soil condition, thereby increasing the potential for emission of fugitive dust. This definition excludes those areas ~~which~~that have:

20910.1 Been restored to a natural state, such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby natural conditions;

20910.2 Been paved or otherwise covered by a permanent structure;
or

20910.3 Sustained a vegetative ground cover over at least 95 percent of an area for a period of at least 6 months.

2101 DUST SUPPRESSANTS: Water, hygroscopic materials, or non-toxic chemical stabilizers used as a treatment material to reduce fugitive dust emissions.

2142 EARTH-MOVING ACTIVITIES: Include, but are not limited to, grading, earth cutting and filling operations, loading or unloading of dirt or bulk materials, adding to or removing from open storage piles of bulk materials, or soil mulching.

2123 FUGITIVE DUST: Any solid particulate matter that becomes airborne, without first passing through a stack or duct~~other than that emitted from an exhaust stack~~, directly or indirectly as a result of the activities of man (i.e. anthropogenic), including the raising and/or keeping of animals.

- 2134 GEOGRAPHIC ULTRAMAFIC ROCK UNIT:** A geographic area that is designated as an ultramafic rock unit or ultrabasic rock unit on maps identified in the California Air Resources Board's Asbestos Airborne Toxic Control Measure or Construction, Grading, Quarrying, and Surface Mining Operations.
- 2145 INACTIVE DISTURBED SURFACE AREA:** Any disturbed surface area upon which active operations have not occurred or are not expected to occur for a period of seven (7) consecutive days.
- 2156 NATURALLY-OCCURRING ASBESTOS:** Asbestos that has not been processed in an asbestos mill.
- 2167 NON-ROUTINE:** Any non-periodic active operation that occurs no more than three times per year, lasts less than 30 cumulative days per year, and is scheduled less than 30 days in advance.
- 2178 OPEN STORAGE PILE:** Any accumulation of bulk material with 5 percent or greater silt content which is not fully enclosed, covered or chemically stabilized, and which attains a height of three feet or more and a total surface area of 150 or more square feet. Silt content level is assumed to be 5 percent or greater unless a person can show, by sampling and analysis in accordance with ASTM Method C-136 or other equivalent method approved in writing by the Executive Officer ~~and of the California Air Resources Board,~~ that the silt content is less than 5 percent. ~~The results of ASTM Method C-136 or equivalent method are valid for 60 days from the date the sample was taken.~~
- 2189 PARTICULATE MATTER:** Any material, except uncombined water, which exists in a finely divided form as a liquid or solid at standard conditions.
- 21920 PAVED ROAD:** An improved street, highway, alley, public way, or easement that is covered by typical roadway materials excluding access roadways ~~that connect a facility with a public paved roadway and are not open to through traffic.~~ Public paved roads are those open to public access and that are owned by any federal, state, county, municipal or any other governmental or quasi-governmental agencies. Private paved roads are any paved roads not defined as public.
- 2201 PM10:** Is particulate matter with an aerodynamic diameter smaller than or equal to 10 microns ~~as measured by the applicable State and Federal reference test methods.~~ a nominal 10 microns as measured by an applicable reference test method or methods found in Article 2, Subchapter 6, Title 17, California Code of Regulations (commencing with Section 94100).

2242 PROPERTY LINE: The boundaries of an area in which either a person causing the emission or a person allowing the emission has the legal use or possession of the property. Where such property is divided into one or more sub-tenancies, the property line(s) shall refer to the boundaries dividing the areas of all sub-tenancies.

2223 ROAD CONSTRUCTION AND MAINTENANCE: Activities undertaken to build roads, highways, railroads, bridges, culverts, drains and other works incidental to road or highway construction, and maintenance activities that involve grading or excavation. Road ~~C~~construction and ~~M~~maintenance does not include the construction of rest stops, maintenance buildings, or parking lots.

2234 SERPENTINE: Any form of the following hydrous magnesium silicate minerals: antigorite, lizardite, and chrysotile.

2245 SILT: Any aggregate material with a particle size less than 74 micrometers in diameter that passes through a No. 200 Sieve.

2256 SIMULTANEOUS SAMPLING: The operation of two PM10 samplers in such a manner that one sampler is started within five minutes of the other, and each sampler is operated for a consecutive period which must be not less than 290 minutes and not more than 310 minutes.

2267 STABILIZED SURFACE means:

2267.1 Any disturbed surface area or open storage pile ~~which~~that is resistant to wind-driven fugitive dust;

2267.2 Any unpaved road surface in which any fugitive dust plume emanating from vehicular traffic does not exceed 20 percent opacity.

228 TRACK-OUT/CARRY-OUT: Any and all bulk materials that adhere to and agglomerate on the exterior surfaces of motor vehicles and/or equipment (including tires) that may then fall onto a paved road.

2279 ULTRAMAFIC ROCK: An igneous rock composed of 90 percent or greater of one or a combination of the following iron/magnesium-rich, dark-colored silicate minerals: olivine, pyroxene, or more rarely amphibole. For the purposes of this section, "ultramafic rock" includes the following rock types: dunite, pyroxenite, and peridotite; and their metamorphic derivatives.

22830 UNPAVED ROADS: Any unsealed or unpaved roads, equipment paths, or travel ways that are not covered by one of the following: concrete,

asphaltic concrete, recycled asphalt, or asphalt. Public unpaved roads are any unpaved roadway owned by Federal, State, county, municipal or other governmental or quasi-governmental agencies. Private unpaved roads are all other unpaved roadways not defined as public.

22931 VISIBLE EMISSIONS: Visible emissions" means any particulate matter that is visually detectable without the aid of instruments other than corrective lenses.

2302 VISIBLE ROADWAY DUST: Any sand, soil, dirt, or other solid particulate matter which is visible upon paved road surfaces and which can be removed by a vacuum sweeper, or a wet sweeper under normal operating conditions.

2343 WIND-DRIVEN FUGITIVE DUST: Visible emissions from any surface area that is generated by wind action alone.

~~**232 WIND GUST:** The maximum instantaneous wind speed as measured by an anemometer.~~

300 STANDARDS

301 VISIBLE EMISSIONS NOT ALLOWED BEYOND PROPERTY LINE: A person shall not cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area, such that the presence of such dust remains visible in the atmosphere beyond the property line of the emission source.

302 VISIBLE EMISSIONS FROM ACTIVE OPERATIONS: In addition to the requirements of Rule 202, VISIBLE EMISSIONS, a person shall not cause or allow fugitive dust generated by active operations, an open storage pile, or a disturbed surface area, such that the fugitive dust is of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke as dark or darker in shade as that designated as No. 2 on the Ringelmann Chart (i.e. 40% opacity), as published by the United States Bureau of Mines.

303 CONCENTRATION LIMIT: A person shall not cause or allow PM10 levels to exceed 50 micrograms per cubic meter, 24 hour average, when determined, by simultaneous sampling, as the difference between upwind and downwind samples collected on high-volume particulate matter samplers or other EPA-approved equivalent method for PM10 monitoring. Sampling shall be conducted in accordance with the procedures specified in Section 500. ~~If sampling is conducted, samplers shall be:~~

~~**303.1** Operated, maintained, and calibrated in accordance with 40 Code of Federal Regulations (CFR), Part 50, Appendix J, or appropriate~~

~~EPA-published documents for EPA-approved equivalent method(s) for PM10.~~

~~**303.2** Reasonably placed upwind and downwind of key activity areas and as close to the property line as feasible, such that other sources of fugitive dust between the sampler and the property line are minimized.~~

304 TRACK-OUT ON TO PAVED PUBLIC ROADWAYS: Visible roadway dust as a result of active operations, spillage from transport trucks, and the track-out of bulk material onto public paved roadways shall be minimized and removed:

304.1 The track-out of bulk material onto public paved roadways as a result of operations, or erosion, shall be minimized by the use of track-out and erosion control, minimization, and preventative measures, and remove within one hour from adjacent streets such material anytime track-out extends for a cumulative distance of greater than 50 feet onto any paved public road during active operations; and

304.2 All visible roadway dust tracked-out upon public paved roadways as a result of active operations shall be removed at the conclusion of each work day when active operations cease, or every twenty-four (24) hours for continuous operations. Wet sweeping or a HEPA filter equipped vacuum device shall be used for roadway dust removal.

304.3 Any material tracked-out, or carried by erosion, and clean-up water, shall be prevented from entering waterways or storm water inlets as required to comply water quality control requirements.

304.4 Track-out control in geologic ultramafic rock units or in identified naturally-occurring asbestos, serpentine, or ultramafic rock areas, shall comply with the requirements of the California Air Resources Board's Asbestos Airborne Toxic Control Measure or Construction, Grading, Quarrying, and Surface Mining Operations.

400 ADMINISTRATIVE REQUIREMENTS:

~~**401 ROAD CONSTRUCTION AND MAINTENANCE OPERATIONS:** A person shall conducting any road construction or maintenance activities shall employ all of the following dust control measures:~~
MINIMUM DUST CONTROL REQUIREMENTS: The following dust mitigation measures are to be initiated at the start and maintained throughout the duration of the construction or grading activity, including any road construction or maintenance activities:

- 401.1** Unpaved areas subject to vehicle traffic must be stabilized by being kept ~~adequately wetted~~, treated with a chemical dust suppressant, or covered. In geologic ultramafic rock units, or when naturally-occurring asbestos, ultramafic rock, or serpentine is to be disturbed, the cover with material that shall contains less than 0.25 percent asbestos as determined using the bulk sampling method for asbestos in Section 502; and.
- 401.2** The speed of any vehicles and equipment traveling across unpaved areas must be no more than fifteen (15) miles per hour unless the road surface and surrounding area is sufficiently stabilized to prevent vehicles and equipment traveling more than 15 miles per hour from emitting dust ~~that is exceeding Ringelmann 2 or visible emissions from crossing the project boundaries~~property line; and.
- 401.3** Storage piles and disturbed areas not subject to vehicular traffic must be stabilized by being kept ~~adequately wetted~~, treated with a chemical dust suppressant, or covered when material is not being added to or removed from the pile; and.
- 401.4** Prior to any ground disturbance, including grading, ~~or excavating, and land clearing,~~ sufficient water or a chemical dust suppressant, must be applied to the area to be disturbed to prevent emitting dust exceeding Ringelmann 2 and to minimize visible emissions from crossing the property line; ~~and.~~
- 401.5** ~~Activities must be conducted so that no track-out from any road construction is visible on any paved roadway open to the public.~~Construction vehicles leaving the site shall be cleaned to prevent dust, silt, mud, and dirt, from being released or tracked offsite.
- 401.6** When wind speeds are high enough to result in dust emissions crossing the property line, despite the application of dust mitigation measures, grading and earthmoving operations shall be suspended.
- 401.7** No trucks are allowed to transport excavated material off-site unless the trucks are maintained such that no spillage can occur from holes or other openings in cargo compartments; and loads are either:
- 401.7.1 Covered with tarps; or
- 401.7.2 Wetted and loaded such that the material does not touch the front, back, or sides of the cargo

compartment at any point less than six inches from the top and that no point of the load extends above the top of the cargo compartment.

401.8 In geologic ultramafic rock units, or when naturally-occurring asbestos, ultramafic rock, or serpentine is disturbed, all equipment must be washed down before moving from the property onto a paved public road.

401.9 In geologic ultramafic rock units, or when naturally-occurring asbestos, ultramafic rock, or serpentine is disturbed, upon completion of the project disturbed surfaces shall be stabilized using one or more of the following methods:

401.9.1 Establishment of a vegetative cover;

401.9.2 Placement of at least three (3.0) inches of non-asbestos-containing material;

401.9.3 Paving;

401.9.4 Any other measure deemed sufficient to prevent wind speeds of ten (10) miles per hour or greater from causing visible dust emissions.

401 — CONSTRUCTION AND GRADING OPERATIONS:

~~401.8 MINIMUM CONTROL REQUIREMENTS: The following dust mitigation measures are initiated at the start and maintained throughout the duration of the construction or grading activity:~~

~~401.8.1 Construction vehicle speed at the work site must be limited to fifteen (15) miles per hour or less; and~~

~~401.8.2 Prior to any ground disturbance, sufficient water must be applied to the area to be disturbed to prevent visible emissions from crossing the property line; and~~

~~401.8.3 Areas to be graded or excavated must be kept adequately wetted to prevent visible emissions from crossing the property line; and~~

~~401.8.4 Storage piles must be kept adequately wetted, treated with a chemical dust suppressant, or covered when material is not being added to or removed from the pile; and~~

~~401.8.5 Equipment must be washed down before moving from the property onto a paved public road; and~~

~~401.8.6 Visible track out on the paved public road must be cleaned using wet sweeping or a HEPA filter equipped vacuum device within twenty-four (24) hours.~~

402 WIND-DRIVEN FUGITIVE DUST CONTROL:

402.1 A person shall take action(s), such as surface stabilization, to minimize wind-driven dust from inactive disturbed surface areas.

403 REQUIREMENTS FOR NATURALLY OCCURRING ASBESTOS AREAS: No person shall engage in any road construction or maintenance operations or construction or grading operations where the area to be disturbed is greater than one (1.0) acre without complying with the requirements of the State's Asbestos Airborne Toxic Control Measure or Construction, Grading, Quarrying, and Surface Mining Operations where:

~~403.1~~aAny portion of the area to be disturbed is located in a geographic ultramafic rock unit; or

~~403.2~~In aAny portion of the area to be disturbed has naturally-occurring asbestos, serpentine, or ultramafic rock as determined by the person, owner/operator, or the Air Pollution Control Officer (APCO); or

403.3Naturally-occurring asbestos, serpentine, or ultramafic rock is discovered by the owner/operator, a registered geologist, or the APCO, in the area to be disturbed after the start of any construction or grading operation.

4024 COMPLIANCE WITH STANDARDS: Any person conducting active operations, or who is responsible for man-made condition of open storage piles, or disturbed surface areas, including disturbance as result of the raising and/or keeping of animals or by vehicles, and including inactive disturbed surface areas, within the boundaries of Placer County shall take all measures necessary to comply with the Standards of Section 300. The property owner, contractors, and any person, that conducts active operations that result in conditions generating fugitive dust is responsible for complying with the provisions of this rule.

4045 REASONABLE PRECAUTIONS: A person shall not allow or permit fugitive dust emissions, without first implementing good housekeeping and or work practices that will reduce and control emissions to the atmosphere. The APCO in determining compliance with Section 300 will

take into consideration causative factors, the fugitive dust control measures taken to comply with Section 300, the extent that all reasonable fugitive dust control measures are implemented prior to a violation, and the timeliness and extent of corrective actions taken. If both preventative and corrective measures were taken and were reasonable under the circumstances, as determined by the APCO, the APCO may find that enforcement action is not warranted.

~~405 TRACK-OUT ON TO PAVED PUBLIC ROADWAYS:~~ Visible roadway dust as a result operations and the track-out of bulk material onto public paved roadways shall be prevented or removed:

~~405.1 Prevent the track-out of bulk material onto public paved roadways as a result of operations and remove within one hour such material anytime track-out extends for a cumulative distance of greater than 50 feet on to any paved public road during active operations; and~~

~~405.2 Remove all visible roadway dust tracked-out upon public paved roadways as a result of active operations at the conclusion of each work day when active operations cease.~~

~~405.3 Track-out in identified naturally-occurring asbestos, serpentine, or ultramafic rock areas shall in addition comply with the State's Asbestos Airborne Toxic Control Measure or Construction, Grading, Quarrying, and Surface Mining Operations.~~

~~406 WIND-DRIVEN FUGITIVE DUST CONTROL:~~

~~406.1 A person shall take the action or actions as may be necessary to minimize wind-driven dust from active operations, up to and including the termination of active operations.~~

~~406.2 A person shall take the action or actions as may be necessary to minimize wind-driven dust from inactive disturbed surface areas.~~

500 MONITORING AND RECORDKEEPING: (None)

501 MONITORING:

501.1 Sampling to determine compliance with the particulate matter concentration limit of Section 303 is only required when deemed necessary by the APCO

501.2 The conduct of sampling to demonstrate compliance with Section 303 may be required, with reasonable notice, of the person discharging emissions, or sampling may be conducted by the

District with the costs of sampling, not to exceed actual costs, borne by the person discharging emissions.

501.3 Samplers shall be operated, maintained, and calibrated in accordance with 40 Code of Federal Regulations (CFR), Part 50, Appendix J, or appropriate EPA-published documents for EPA-approved equivalent method(s) for PM10.

501.4 Samplers shall be placed upwind and downwind of key activity areas and as close to the property line as feasible, such that other sources of fugitive dust between the sampler and the property line are minimized.

501.5 Procedures for the conduct of simultaneous sampling to determine compliance with Section 303, and the reporting of results, shall be approved by the APCO.

502 TEST METHODS

502.1 Ultramafic Rock: The ultramafic rock composition of any material shall be determined using standard analysis techniques including, but not limited to, color index assessment, microscopic examination, petrographic analysis or rock thin sections, or chemical analysis techniques, such as X-ray fluorescence spectrometry or inductively coupled plasma analysis.

502.2 Bulk Sampling Methods: ARB Test Method 435, or an alternative asbestos bulk test method approved in writing by the Executive Officer of the California Air Resources Board, shall be used to determine the asbestos content of a bulk sample. For the purposes of determining compliance with this section, references in ARB Test Method 435 to "serpentine aggregate" shall mean "gravel" or other "bulk materials" to be tested for asbestos content.

503 RECORDKEEPING

503.1 Record of Control Implementation: Any Person engaged in any active operation subject to this rule shall maintain records of actions to stabilize surface areas sufficient to establish location, type and date of treatment. Records shall be maintained and be readily accessible for two (2) years after the date of each entry and shall be provided to the District upon request and shall be open for inspection during unscheduled audits during normal business hours.

503.2 Sampling Recordkeeping Requirements: Any person subject to this rule shall maintain for at least two (2) years all of the following

records and such additional records required by the State's Asbestos Airborne Toxic Control Measure or Construction, Grading, Quarrying, and Surface Mining Operations when this regulation applies. results of any air sampling or air monitoring conducted at the request of the APCO;

503.3 The results of any asbestos bulk sampling that meets any of the following conditions:

A. The asbestos bulk sampling was conducted by the owner/operator to document that cover material in geologic ultramafic rock units, or when naturally-occurring asbestos, ultramafic rock, or serpentine is to disturbed, contains less than 0.25 percent asbestos.

B. The asbestos bulk sampling was done at the request of the APCO.